

# Conference Booklet

50th Annual Conference

Nov. 1-3, 2019



McCormick's Creek State Park  
Spencer, IN





## Schedule at a Glance

### Friday, November 1

- 8:00 am Registration opens (Lobby)
- 8:30 am Pre-conference Workshop (Sycamore Room)  
Lunch - on your own
- 1:00 pm Kickoff/Welcome Woo hoo! (Oak Room)
- 2:15 pm Educational Sessions
- 3:30 pm Educational Sessions
- 5:30 pm New Members / Students Welcome  
(Sycamore Room)
- 6:00 pm Awards Banquet (Oak Room)
- 6:30 pm Awards & Board Election Results (Oak Room)
- 7:00 pm Kathy McGlaufflin Keynote (Oak Room)
- 8:00 pm EEAI Has Talent Showcase (CCC)

### Sunday, November 3

- 2:00 am Set clocks back 1 hour
- 6:30 am Inspirational hike (Meet in Lobby)
- 7:30 am Breakfast (Dining Room)
- 8:30 am Gathering of all attendees in Oak Room for  
announcements
- 9:00 am Educational Sessions
- 10:00 am Checkout break
- 10:30 am Educational Sessions
- 11:30 am Farewell announcements in Oak Room



### Saturday, November 2

- 6:30 am Early bird hike (Meet in Lobby)
- 7:30 am Breakfast (Dining Room)
- 8:30 am Gathering of all attendees in Oak Room  
for announcements
- 9:00 am Educational Sessions
- 10:15 am Educational Sessions
- 11:30 am Lunch (Dining Room)
- 12:30 pm Field trips
- 6:00 pm Dinner (Dining Room)
- 6:45 pm Richard Louv Keynote (Oak Room)
- 7:45 pm Book Signing & Silent Auction Closes (Oak  
Room)
- 8:00 pm 50th Anniversary Reception- Cash Bar (Oak  
Room)

### Bookstore

The Muscatatuck National Wildlife Refuge bookstore will be open Friday and Saturday in the Oak room. They have puppets, jewelry, gadgets, gimmicks, and more natural history books than you can even imagine. Even career "nature book hoarders" will find something to love (and bring home!) at this bookstore!

# Welcome

# Woo hoo

## Things to know!

You have questions? Look for any of the committee members.

The meals that are in the dining room include the buffet only.

In your name tag you will find a Conference cheat sheet. You can plan your weekend by using this schedule. Just circle the room of the session you want to attend. This way you will not have to keep referring to this booklet.

Alcohol is only allowed in your private rooms or at the CCC Building.

The wifi and mobile reception at McCormick's Creek State Park is spotty at best. The phone for the park is 812-829-4881

## Silent Auction

We will be doing a Silent Auction at the conference. All proceeds go to help EEAI with scholarships and conference costs. Please bring items along with your cash or checkbook.

## Hospitality at the CCC Building

The CCC Building will be hospitality central. The building will be open all day Friday and Saturday until 11 pm. Feel free to drop in, have a snack and socialize. Alcoholic beverages are allowed, and there will be a full size fridge--plus other drinks. Donations are welcome. Stop in and be social!

## Conference Sponsors



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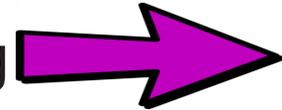


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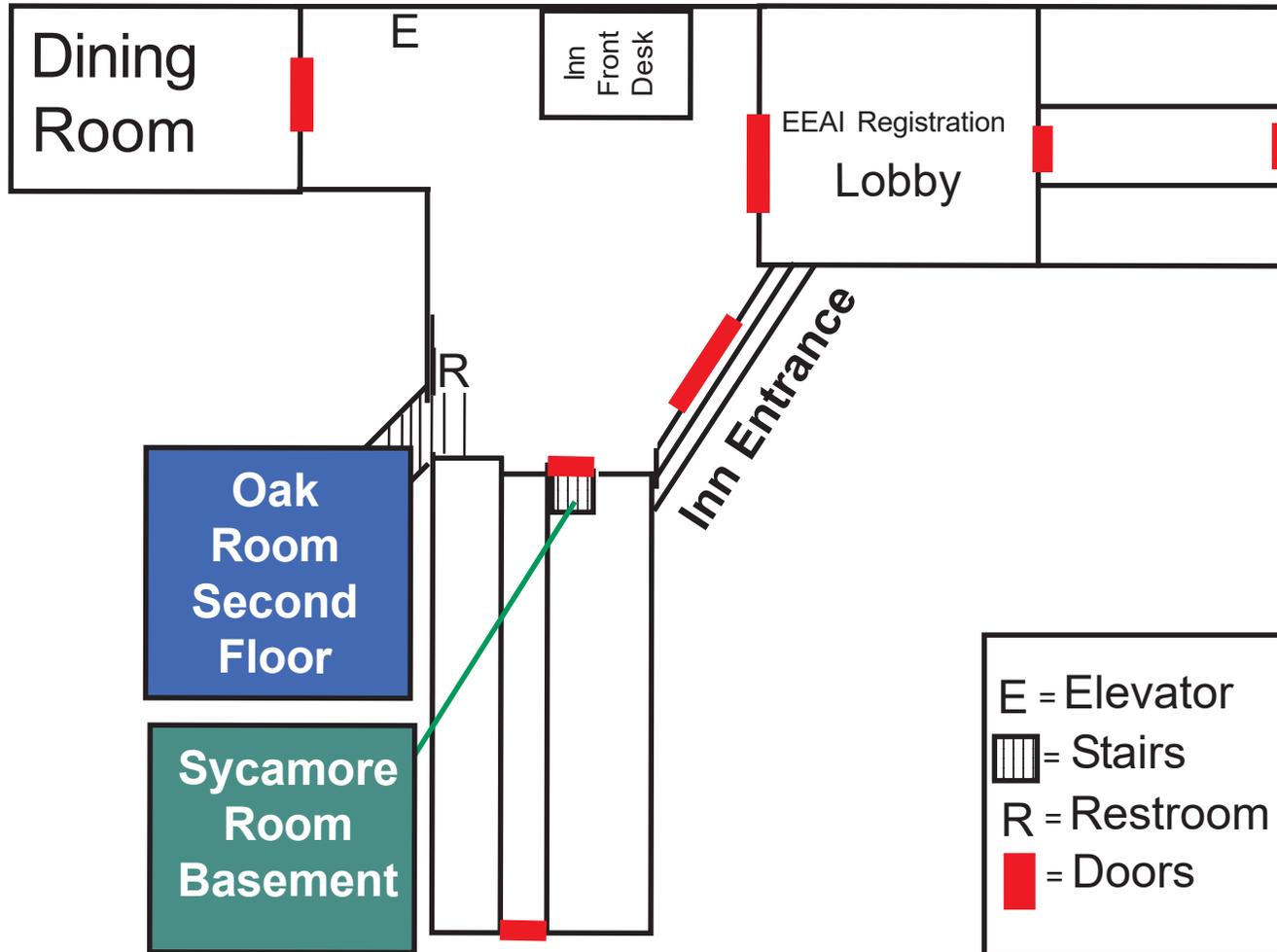


# McCormick's Creek State Park and Canyon Inn

CCC Building



Recreation Building



- E = Elevator
- ▤ = Stairs
- R = Restroom
- = Doors

# EE SUPERHERO STRANDS

All of the educational sessions will be grouped into one of these strands. The superhero to the right will represent that strand.

## **SUPER POWERS:** Science-based Research on Learning Styles & Strategies

Unlock the power of your audience to process, retain, and build upon your environmental messages by utilizing research-based findings on how and why humans learn.



## **SUPER SKILLS:** Best Practices for EE Excellence

Engage your audiences with proven methods for delivering programs that provide content in riveting, audience-appropriate and entertaining ways.



## **SUPER KNOWLEDGE:** Natural Resources Research

Discover what current research continues to reveal about the fascinating natural resources of our region.



## **SUPER STRATEGIES:** Connecting STEM Education to EE

Explore ways to provide STEM-appropriate programming with a natural resource focus.



# Friday, November 1

## Pre-Conference Workshop

8:30 am - 12:00 pm (Sycamore Room)

Guidelines for Excellence in EE Workshop: Professional Development for Environmental Educators

The North American Association for Environmental Education has developed a series of guidelines that set the standards for high-quality environmental education. Quality environmental education programs help develop an environmentally literate citizenry that can compete in our global economy; has the skills, knowledge, and inclinations to make well-informed choices; and exercises the rights and responsibilities of members of a community.

How does one achieve excellence in environmental education? In this workshop, participants will be presented with a set of competencies for environmental educators in a variety of job settings and examine professional responsibilities of environmental educators.

### Donna

Donna Rogler is the Indiana Project Learning Tree Coordinator and Education Specialist for the Indiana Division of Forestry.



Renee Strnad is the North Carolina Project Learning Tree Coordinator with North Carolina State University Extension Forestry. Renee serves on NAAEE's Affiliate Network Steering Committee



and is a member of the Guidelines Trainer Bureau. Join these two ladies on a journey to learn about EE best practices and EE Excellence. We all strive to be our best and this Pre-Conference Workshop will put you on the right path to excellence.

### Renee

# Friday, November 1

8:00 am - Registration Opens (Lobby)

Lunch is on your own

1:00-2:00 pm – Kickoff/Welcome Woo hoo! (Oak Room)

2:15-3:15 pm – Four Educational Sessions

## Sycamore Room



### Redefining Community Service: The Power of Having an Outward Mindset

To nearly 50 percent of disadvantaged youths, “community service” has a negative connotation. They believe peers and adults will perceive them as being punished. In this workshop, participants will learn how ProAct Indy is redefining youth’s idea of service and transforming lives. Tools and resources will be provided to help engage youth in critical service-learning through ProAct’s “Outward Mindset” model.

**Presenter- Derrin Slack**

Founder & CPO of ProAct Indy

## CCC Building



### Utilizing Citizen Science to Reach Natural Resource and Educational Objectives

Husband and wife team, Brittany Davis-Swinford (Indy Parks) and Tom Swinford (IDNR), will fill you in on the many citizen science projects they have participated in and coordinated within their combined forty years of resource management and educational outreach. Instruction will include: identifying natural resource and educational objectives, seeking the “right” volunteers, case studies of citizen science projects, and classroom discussion on “what has worked at your property or facility.”

**Presenters- Brittany & Tom Swinford**

Senior Park Manager of Eagle Creek Park, Indy Parks  
Asst. Director IDNR Div. of Nature Preserves

## Oak Room



### What Does Climate Change Mean for Indiana?

Our climate shapes our lives. The ways we build our roads, manage our farms, move our water, and use energy are all influenced by our unique Indiana climate. But our climate has been changing, and it will continue changing in ways that affect our productivity, our safety, and our livelihoods. In this session we will look at why climate change is an urgent, local issue with relevance to all Hoosiers, we'll use the best available research to dig into the question “what does climate change mean for Indiana” and we'll talk about resources to help formal and informal educators incorporate this important information into lesson plans.

**Presenter- Melissa Widhalm**

Operations Manager, Purdue Climate Change Research Center

## Recreation Building



### STEM, Nature and Project-Based Learning Connect for Success

Learn more about STEM, the Engineering Design Process, and Project-Based Learning through hands-on experience with sample lessons. Gain better understanding of the basics of Project - Based Learning, while making connections between STEM practices and academic standards, the environmental literacy guidelines and the engineering design process. Includes an overview, lessons to take back, literature connections, tips for success, and ideas for implementation.

**Presenters- Vera Vanderkooy & Angela Fitzgerald**

The STEM Connection

# Friday, November 1 Continued

3:30-4:30 pm – Four Educational Sessions

## Sycamore Room



### Places Matter: Research on Two-Way Communication in Protected Areas and Thoughts on Student/Visitor Experiences

Whether we are environmental educators or interpreters, naturalists or teachers, working with students or the general public, engaging children or adults, we often find ourselves in exceptional places with the goal of promoting greater understanding and care. Is our work effective in meeting this goal? If so, how do we know? This presentation will look at environmental education and interpretation as a process of two-way public communication based on constructivist learning, teaching philosophy and dialogue theory. Research examining the effectiveness of two-way communication at five sites managed by the National Park Service will be shared, with implications for improving our effectiveness as EE providers.

#### Presenter- Brian Forist, Ph.D

Lecturer in Outdoor Recreation, Parks & Human Ecology; Indiana University

## CCC Building



### Positive Outcomes with Outdoor Learning Spaces

There is a growing body of research that supports the use of outdoor learning in the development and health of young children, ranging from physical and mental health to accelerated math and science learning. The thoughtful organization and design of components and frequency of use of these spaces is attributable to better learning outcomes. Implementation, and community stewardship of these outdoor learning spaces can actually make communities healthier and greener places to live. Additionally the continuation of outdoor learning opportunities in preK-12 programming help to grow children into more self-aware, resilient, and stewardship conscious adults. Come learn about important components and learning outcomes you can expect in nature based learning spaces.

#### Presenter- Carrie Tauscher

Indiana Community and Urban Forestry Coordinator

## Oak Room



### The Hardwood Ecosystem Experiment: A 10-Year Update

The Hardwood Ecosystem Experiment is a long-term, landscape-level study of the effects of timber management on plants and animals in south-central Indiana. Early findings from the first ten years of the project will be presented.

#### Presenter- Charlotte Owings

Project Manager, Hardwood Ecosystem Experiment

## Recreation Building



### Citizen Science in the Classroom and in Informal Environments

The Global Learning and Observations to Benefit the Environment (GLOBE) Program is an international citizen science program that promotes STEM learning for both students and the public worldwide with the opportunity to participate in data collection and the scientific process. Participation in both GLOBE protocols and learning activities promote meaningful understanding of the Earth system and environment. This session will provide an introduction to GLOBE resources and encourage participation in various STEM-based activities. The GLOBE Observer app will be introduced to provide participants with a way to collect data in various environments.

#### Presenters- Steven Smith & Sarah Nern

Purdue University College of Science K-12 Outreach

## Friday, November 1 Continued

- 5:30 pm – New Members / Students Welcome (Sycamore Room)
- 6:00 pm – Dinner and Awards Banquet (Oak Room)
- 7:00 pm – Kathy McGlaulin Keynote (Oak Room)

### Friday Night Keynote--- Kathy McGlaulin

#### Excellence in EE: Challenges and Opportunities

Kathy McGlaulin will share insights on opportunities and challenges for supporting high quality EE for the next 50 years. Discussion points will include:

1. Curriculum opportunities such as STEM and Green Schools.
2. Policy and advocacy (how to think not what to think emphasized) issues and how to address, such as climate change, ESSA, SEEC, etc.
3. Technology and getting outside.
4. Guidelines and connection to their work.



**Kathy McGlaulin**- Retired National Project Learning Tree Director. Kathy will be the Friday night Keynote Speaker. She has a wealth of knowledge with years of experience in EE. Everyone will gain new insights from her during this Keynote.

## Friday, November 1 Continued

- 8:00 pm – **EEAI Has Talent Showcase (CCC)**  
Bring your talent...any talent to this contest. It is not all about singing this year.

## Saturday, November 2

- 6:30 am – Early bird hike (Meet in Lobby)
- 7:30 am – Breakfast (Dining Room)
- 8:30 am– Gathering of all attendees in Oak Room for announcements

### EEAI Fun Facts

EEAI was formed in 1969 and called the Conservation-Outdoor Education Association of Indiana. The name was approved and changed to the Environmental Education Association of Indiana in 1979. The first annual meeting took place May 16, 1970 at Indiana Central College, Indianapolis, IN.



50 Years

# Saturday, November 2

9:00-10:00 am – Four Educational Sessions

## Sycamore Room



### Brain Research and Its Implications for EE: Making the Connection

Explore the principles of what brain research tells us about information processing, attention, and meaning and understand how to apply those principles to environmental education. Walk away with practical, concrete, immediately applicable brain compatible strategies to make the connection to reach and teach your stakeholders.

#### Presenter- Deb Sachs

Assistant Professor in the School of Education at the University of Indianapolis

## CCC Building



### Social Studies and the Environment: Connecting our Present to our Past as we Look to the Future!

The goal of this session is to showcase lessons, provide ideas and reconnect our study of society to the natural world. A wide range of established programs will be discussed which take students from awareness to action (including GENI, Project Citizen, Peace Learning Center, among others), some dissection of specific lesson plans will be included, and participants will engage in hands-on sampling of one of the many simulations developed by Brown University focused on "Climate Change and Questions of Justice."

#### Presenter- Troy Hammon

Teacher at Shortridge IB High School

## Oak Room



### Birding & Citizen Science for Non-Birders

Are you looking for an easy way to engage children and adults in a citizen science project? Birds are everywhere! In any habitat, at any time during the day, birds will be present. Come learn how to use two simple, FREE apps—Merlin & eBird to help kids and adults learn about bird identification and citizen science. The presenter worked as a Teacher-in-Residence at the Cornell Lab of Ornithology in Ithaca, NY during the summer of 2018. In addition, there will be free window birdfeeders for all participants provided by the Cornell Lab of Ornithology.

#### Presenter- Dave Shafer

STEM Coordinator at Skiles Test School of STEM, Lawrence Township Schools

## Recreation Building



### The Shape of Science: Creating Inexpensive Teaching Aids with 3D Printing

The Shape of Science is a new online resource providing teaching aids for the STEM disciplines. Files for printing teaching aids can be purchased very inexpensively, downloaded and printed immediately. All teaching aids come with short descriptions of the Next Generation Science Standards that are met with the teaching aid, along with suggestions for activities. The online community provides a place for feedback on the teaching aids for discussion related to meeting standards. There is also a place to suggest and vote upon the next teaching aid that we will produce.

#### Presenter- Jeffrey Holland, Ph.D

Purdue University, Dept. of Entomology

# Saturday, November 2 Continued

10:15-11:15 am – Four Educational Sessions

## Sycamore Room



### Can kids be a part of the solution? IGL for the win!

Intergenerational learning (IGL) is defined as people of all ages learning together, and from, each other; gaining skills, values, and knowledge. Researchers at North Carolina State University have been using this age-old method of knowledge transfer to study two pressing environmental issues: climate change and marine debris. Despite mounting scientific consensus around needs to address both of these issues, generating a united response among the adult American public remains challenging, however, youth and families may be a promising avenue. This presentation will introduce our climate change and marine debris research projects, what we have learned, how we are using this model in additional research. As a group, time will be spent discussing what these results mean for EE practitioners, and how program models could be adapted to include best IGL practices.

### Presenter- Renee Strnad

North Carolina Project Learning Tree Coordinator with North Carolina State University Extension Forestry.

## CCC Building



### The Keys to Program Excellence (P-O-E-T-R-Y)

Join naturalist Foster Brown as he leads you through the artful components of developing an educational program by using the acronym P-O-E-T-R-Y (purposeful, organized, enjoyable, thematic, relevant and you). These keys of excellence are based off of the National Association for Interpretation's Certified Interpretive Guide training. Come learn how to make a good program into a great one!

### Presenter- Foster Brown

Naturalist Cleveland Metroparks

## Oak Room



### Birds of the Hardwood Ecosystem Experiment – The First 10 Years

With three years of pre-harvest data and seven years of post-harvest data, the picture of how many bird species respond to timber harvesting is beginning to come into focus.

### Presenter- Jeff Riegel

Field Coordinator for the Hardwood Ecosystem Experiment and has been with the project since its beginning in 2006.

## Recreation Building



### STEAM: Lakes & Streams in China

A small group of 5 educators from Warsaw Community Schools took the principles of STEAM education (science, technology, engineering, art, math) to a school in Hangzhou, China. The team each taught a discipline from STEAM through the focus of lakes and streams that is done locally in Kosciusko County, Indiana. Two members of the team will share about their experiences, the curriculum, and the connections that lakes and streams studies have to any part in the world.

### Presenters- David Burden & Brock Rhodes

STEM Instructional Coach for Washington - STEM Academy- Warsaw Schools  
STEM Instructional Coach for Claypool Elementary and Lincoln Elementary

## Saturday, November 2 Continued

11:30 am – Lunch (Dining Room)

12:30 pm–Field trips (Via Carpool) and free time at the park

### Fish Creek Preserve

As a retired teacher, Myriam Wood loves sharing her special place with visitors. For over 50 years, she has been restoring the land by planting pine trees, controlling erosion, and establishing mini-prairies in an old field. Tour the gardens, hills, woods, and creek and learn more about the plight of pollinators and how to help them through landscaping with native plants. No limit.

### Buckner's Cave exploration and restoration project

Visit a special caving preserve and crawl into the darkness. After traversing some of the underground chambers, help remove graffiti from the cave walls. Hard hats with lights will be provided, as well as graffiti removal equipment. Wear clothes that can get dirty. Knee pads strongly recommended. Limit 20.

### Oliver Winery Creekbend Vineyard and Bean Blossom Bottoms Nature Preserve

Hike the totally flat Sycamore Land Trust property known for its wetland habitats, eagle nest, heron rookery, and newly rebuilt boardwalk. Then, stop at the Creekbend Vinyard to learn about how environmentally sensitive growing practices benefit the land. Wine samples will be available! Limit 20.

### Wonderlab



An exceptional educational experience, Wonderlab has hands-on activities for all ages. There is a tidal saltwater aquarium, bearded dragons, beehive, water play area, and more. Bring some money for the gift shop; there are treasures you will want to take home. No limit.

### Flatwoods and Detmer Park

Visit the spot where the glaciers stopped and learn how they affected local geology and groundwater. Last summer, the Indiana Water Resources conference took place at Flatwoods Park and they left behind monitoring wells. The park has also been used for elementary school field days with a water theme, using the sundial, weather station, and working windmill. At Detmer Park, see how a bioswale has been planted to clean runoff for the parking lots and gardens are used to raise food for the hungry. No limit.

### McCormick's Creek State Park

Join staff from Indiana Geological and Water Survey and McCormick's Creek State Park for a geological field trip of McCormick's Creek State Park. In addition to a short, rugged trip through Wolf Cave, you will also learn a few activities you can take back to your properties! No limit.



# Saturday, November 2 Continued

6:00 pm – Dinner (Dining Room),

6:45 pm –Richard Louv Keynote (Oak Room)

7:45 pm –Book Signing and Auction Closes (Oak Room)

8:00 pm –50<sup>th</sup> Anniversary Reception- Cash Bar (Oak Room)

## Saturday Night Keynote Richard Louv

### THE HYBRID MIND:

The ultimate multitasking is to live simultaneously in both the digital and physical worlds, using computers to maximize our powers to process intellectual data and natural environments to ignite our senses and accelerate our ability to learn and feel—combining the resurfaced “primitive” powers of our ancestors with the digital speed of our teenagers.



There's no denying the benefits of the Internet. But electronic immersion without a force to balance it creates a hole in the boat, draining our ability to pay attention, think clearly, be productive and creative. To combat these losses, our society seems to look everywhere but the natural domain for the building of better brains.

The more high-tech our lives become, the more nature we need.

## Richard Louv Sponsors



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# Sunday, November 3

6:30 am – Inspirational hike (Meet in Lobby)

7:30 am – Breakfast (Dining Room)

8:30 am – Gathering of all attendees in Oak Room for announcements

9:00-10:00 am – Three Educational Sessions

## Sycamore Room



### “Inquirizing” Environmental Education Programs: Highlighting the Natural Ties Between EE and Inquiry

Aligning environmental education opportunities to science standards can make your programs more attractive to teachers and school administrators. Let's look at the strong natural connections between the two - inquiry! Dr. McConnell will discuss his observations of authentic inquiry as used in the scientific research community and the rich opportunities available in a wide range of environmental education settings for learners to participate in the same processes and practices. Learn about some strategies and resources to help you tie your program to inquiry as described in state and national education standards.

**Presenter- Tom McConnell, Ph.D**

Assoc. Professor of Science Education, Ball State University

# Sunday, November 3 Continued



## Recreation Building

**Wake Up, Woods: A children's book that reveals the beauty and science of our woods in the spring.**

Wake Up, Woods celebrates the harbingers of spring in our woodlands through illustration and verse. Fascinating scientific facts will educate children and adults about our native plants and their pollinators.

**Presenters-Melissa Moran & Shane Gibson**

Indiana Native Plant Society & Director of Community Programs at The Nature Conservancy.

Environmental Education Director, Sycamore Land Trust

## Oak Room



**Bats of Indiana: Threats and Opportunities for Conservation**

Dr. Joy O'Keefe will describe the common and uncommon bat species found in Indiana, the major threats to these bats (habitat loss, energy development, and disease), and the opportunities for educators and naturalists to aid in bat conservation efforts in the Midwest.

**Presenter- Dr. Joy O'Keefe**

Associate Professor in the Department of Biology at Indiana State University and the Director of the Center for Bat Research.

# Sunday, November 3 Continued

10:00-10:30 am – Checkout break

10:30-11:30 am– Three Educational Sessions

## Sycamore Room



### Excellence in EE-Building a Dream Team

A world class program takes a strong foundation and grit- in the literal and figurative forms! Come spend some time with the crew behind the Avon Outdoor Learning Center and share in the rise, road blocks and successes of a public school program that serves more than 10K visitors a year- with one paid position and some kick-a\$\$ community support. This group includes EE professionals, classroom teachers, community partners and volunteers who design, implement and improve on programs, usually with laughter & chocolate involved too. We will be sharing resources, curriculum hacks and programming tips too.

#### Presenter- Jennifer Davies

Instructional Coordinator for the Avon public school's Outdoor Learning Center in central Indiana.

## Oak Room



### The Flora of Indiana

The flora of Indiana is influenced by a number of biotic and abiotic factors including bedrock, topography, soils, climate, fire, and glacial history. These factors have led to the delineation of 12 natural regions across the Indiana landscape. There are similarities between the flora of Indiana and that of nearby states, but the flora within the state differs substantially from natural region to natural region. You may be surprised to learn of the incredible plant species diversity present as we virtually tour the crossroads state.

#### Presenter- Scott Namestnik

Natural Heritage Program Botanist, IDNR Division of Nature Preserves

## Recreation Building



### The DO IT Now Program: Connecting STEM Education to Environmental Issues Utilizing Systems Thinking

The Develop Opportunities for Innovative Thinking (DO IT) Now Program strives to engage youth in critical and systems thinking by challenging them to identify and address a problem in their community, and thereby realize the necessity of being a responsible citizen with a lifestyle that doesn't compromise the ability of future generations of youth to meet their needs. Almost every environmental issue being addressed today has many explicit and implicit connections to STEM Education. In this session we will explore some examples of projects completed by student leaders, how the students utilized STEM skills and how their teachers drew explicit connections to STEM. Opportunities for how to further connect STEM, systems thinking, and EE will also be discussed.

#### Presenter- Brian Plankis

Self-employed Environmental Education Consultant

11:30 am –Farewell announcements in Oak Room